U.S. Patent Application No. 10/053,777   Docket No: 2000-0056
Art Unit: 2157

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in

the application:

Listing of Claims:

1.   (Currently Amended) A ~~speech-to-text encoding and decoding~~ device for use

in a network comprising:

a modem that connects with the network to convey information to, and

receive information from the network;

a subscriber terminal having an interface that enables communication with the

modem, a display interface that communicates with a visual display device to display

information, a telephone interface that enables communication with a telephone to

convey voice information of a user, and a buffer that receives and stores speech

information; and

a processor to decode and display on the display device speech information as

text in a form of words upon receipt of speech information from the network.

2.   (Original) The device as recited in claim 1, wherein the subscriber terminal

further includes:

a memory that stores voice patterns, and wherein

said processor further includes a speech analyzer that recognizes an incoming

voice pattern based on information stored in the memory.

3.   (Canceled)

2

U.S. Patent Application No. 10/053,777   Docket No: 2000-0056
Art Unit: 2157

4.   (Currently Amended) The device as recited in claim 1, wherein said

subscriber terminal includes a speech database for storing speech segments identified

with certain users, and said processor accesses said database to identify and display

~~the~~ an identity of users according to matches between speech segments received in

real time and stored in the database.

5.   (Original) The device as recited in claim 1, wherein said processor includes a

detector that responds to subscriber inputs to activate and deactivate speech

recognition.

6.   (Original) The device as recited in claim 5, wherein said detector comprises a

DTMF tone detector and said user inputs comprise DTMF tones of a telephone.

7.   (Currently Amended) A method of providing automated speech-to-text

translation ~~for a hearing-impaired individual~~, the method comprising:

        receiving at a broadband telephony interface speech packets destined for ~~the~~

~~hearing-impaired~~ an individual;   .

        storing the speech packets in a buffer; and

        processing the speech packets to display textual representations thereof as

words on a display device.

8.   (Original) The method as recited in claim 7, further comprising:

        storing speech patterns in a database, and

        analyzing and comparing incoming speech obtained by processing the speech

packets with speech patterns stored in the database in order to provide speaker

3

U.S. Patent Application No. 10/053,777·   Docket No: 2000-0056
Art Unit: 2157

identification capability.

9-10.   (Canceled)

11.   (Original) The method as recited in claim 7, further comprising:

responding to a command from the subscriber to activate and deactivate

speech processing.

12.   (Currently Amended) A ~~speech-to-text encoding and decoding~~ device for use

in a network comprising:

a network interface that enables communication with the network;

a subscriber terminal that communicates information with the network

interface, a display device, and a telephone device ~~or other auditory device~~; and

a processor that decodes and displays speech information as text <u>in a form of</u>

<u>words</u> on the display device during receipt of real time speech information from the

network and that encodes ~~and/or~~ <u>and</u> transmits speech information to the network

when speech information is received from the telephone.

13.   (Original) A speech-to-text translation device comprising:

a subscriber terminal having a network interface that enables communication

with a network, a display interface that communicates with a visual display device to

display textual information, and a telephone interface that enables communication

with a telephone to convey voice information of a user,

said subscriber terminal including a processor utilizing a speech buffer to

receive at least one of streamed and real time speech information and to decode and

4

U.S. Patent Application No. 10/053,777   Docket No: 2000-0056
Art Unit: 2157

display speech information as text on the display device during receipt of speech

information from the network, and a database that enables identification of a prior

caller based on speech segments stored in a database.

14.   (Canceled)

15.   (Currently Amended) A method of speech-to-text translation comprising:

receiving real time speech information;

converting the real time speech information into text ;

analyzing the speech information to determine identity of a caller based on

previously stored speech segments; and

displaying at least one of a textual representation of the speech [[,]] including

punctuation, obtained as a result of the analyzing step.

16.   (Currently Amended) A method of speech-to-text translation comprising:

receiving real time speech information;

converting the real time speech information into text;

analyzing the speech information to determine an identity of a caller based on

previously stored speech segments and at least one of gender, soft-spoken words,

hard-spoken words, shouting, laughter, or human expression; and

displaying at least one of a textual representation of the speech[[,]] including

punctuation, obtained as a result of the analyzing step.

17.   (New) A machine-readable medium including instructions for a processor, the

machine-readable medium comprising:

5

U.S. Patent Application No. 10/053,777   Docket No: 2000-0056
Art Unit: 2157

instructions for receiving, at a broadband telephony interface, speech packets

destined for an individual;

storing the speech packets in a buffer; and

processing the speech packets to display textual representations thereof as

words on a display device.

18.   (New) The machine-readable medium of claim 17, further comprising:

instructions for storing speech patterns in a database, and

instructions for analyzing and comparing incoming speech obtained by

processing the speech packets with speech patterns stored in the database in order to

provide speaker identification capability.

19.   (New) The machine-readable medium of claim 18, further comprising:

instructions for displaying an indication of a speaker identity of a speaker

associated with ones of the displayed textual representations.

20.   (New) The machine-readable medium of claim 17, further comprising:

instructions for analyzing characteristics of incoming speech obtained by

processing the speech packets and inserting punctuation in the displayed textual

representations thereof in response to the analysis.

21.   (New) The machine-implemented method of claim 20, wherein the

characteristics include at least one of changes in tone, volume, or inflection.

6